

ABSTRACT OF THE DISCLOSURE

An observation optical system comprises an image display element 5 and an eyepiece optical system which introduces an image formed by the image display element 5 to a center of an eye of an observer without forming an intermediate image, so as to allow the observer to observe the image as a virtual image. The eyepiece optical system is constructed and arranged to bend the optical axis using reflecting surfaces so as to be compact. The optical axis lies in a plane, with respect to which the optical system is formed symmetric. The optical system includes a prism 3 having an entrance surface 3_3 , a plurality of curved reflecting surfaces 3_1 , 3_2 and an exit surface 3_1 . The reflecting surface 3_2 is provided with a volume hologram (HOE) 4. Whereby, it is possible to provide an image observation optical system which can be made compact enough to be usable as an image display unit for a cellular phone or a portable intelligent terminal, and which can achieve high image definition and wide field angle while controlling chromatic aberration of magnification to be small.